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Graduate Program in Psychology

A thesis submitted in partial fulfillment of the requirements for the degree in Master of Science

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REACTIONS TO NEGATIVE FEEDBACK: THE ROLE OF RESILIENCE
AND IMPLICATIONS FOR COUNTERPRODUCTIVITY

(Thesis format: Monograph)

by

Kabir N. Daljeet

Graduate Program in Psychology

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Science

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London, Ontario, Canada

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Abstract

The model of Organizational Frustration (Spector, 1978) suggests that individuals are more likely to engage in counterproductive work behaviour (CWB) after having had a negative experience at work due to the negative emotions brought on by such an experience. The King and Rothstein (2010) model of resilience suggests that the degree to which an individual self-regulates after an adverse workplace experience influences how they subsequently behave. Using vignettes, participants were told they received either positive or negative feedback regarding their job performance and were asked to fill out measures of resilience and intentions to engage in CWB. In a sample of 292, employed, male participants, it was found that behavioural self-regulation moderates the relationship between feedback type and CWB, as mediated by affect. This suggests that the more one engages in self-regulation, the less CWB they will likely engage in after having a negative reaction to an adverse workplace experience.

Keywords: Reactions to Feedback, Performance Feedback, Negative Feedback, Counterproductive Work Behaviour, Affect, Resilience

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Reactions to Negative Feedback: The Role of Resilience and Implications for Counterproductivity

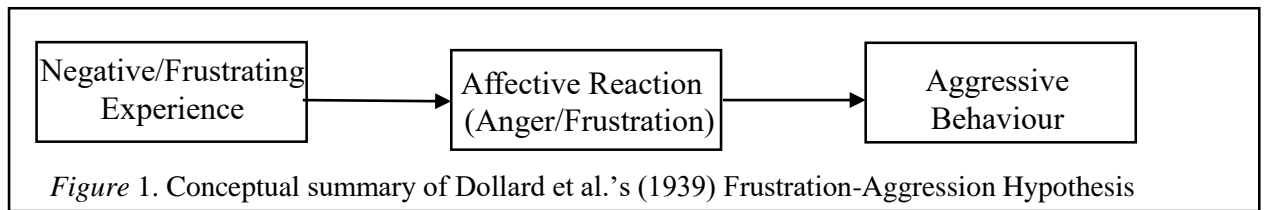
According to Rotundo and Sackett (2002), job performance can be deconstructed into three primary components: task performance, citizenship performance and counterproductive performance. Counterproductive performance, more commonly referred to as counterproductive work behaviour (CWB) is a broad term used to describe a variety of intentional, workplace behaviours that harm or disrupt an organization, its goals, or other employees. Examples include: theft, workplace violence, unauthorized internet use, taking extra breaks, and engaging in non-work activities (Bennet & Robinson, 2000; Spector, et al. 2006).

In recent years there have been several studies that have examined the financial costs associated with various types of CWB. It has been reported that workplace violence and workplace theft costs employers approximately 4.2 billion and 30 billion USD, respectively, in direct and associated costs each year (Camara & Schneider, 1994). Similarly, the costs associated with the loss of productivity due to employees wasting time surfing the internet each year is said to be around 54 billion USD (Young, 2010). As such, it can plainly be seen that there is (financial) value in not only identifying who is likely to engage in CWB but identifying and advancing our understanding of the psychological mechanisms that underlie the decision to engage in CWB such that steps can be taken to mitigate its (future) effects.

CWB and the Frustration-Aggression Framework

The Frustration-Aggression Hypothesis by Dollard, Doob, Miller, Mowrer and Sears (1939) holds that individuals who experience personal frustration, typically as a result of either being impeded from or being incapable of achieving a goal will

sometimes, as a result, act out in a behaviourally aggressive fashion as a response to the



frustration (summarized in Figure 1.). Building on this work by Dollard et al. (1939)

researchers have developed, and subsequently tested, a model which they believe offers

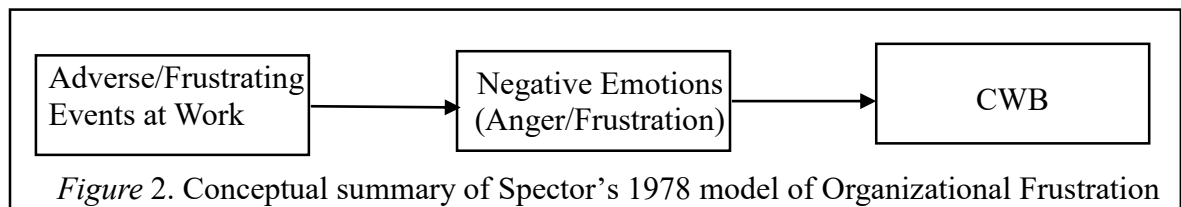
an explanation as to how, when, and why CWB happens in the workplace (Fox &

Spector, 1999; Penney & Spector, 2002; Spector, 1975, 1978). In their model

(summarized in Figure 2.), the researchers propose that many people who encounter

adverse and personally frustrating events at work will experience negative emotions as a

result (e.g. anger, stress, and frustration).



Subsequently, some individuals will make the decision to respond to, and resolve, these

negative emotions by acting out behaviourally in some sort of 'aggressive' way, which,

in the context of the workplace, manifests itself as CWBs. Spector and colleagues refer to

this model as the model of Organizational Frustration (Fox & Spector, 1999; Penney &

Spector, 2002; Spector, 1975, 1978).

Studies by Spector and colleagues have tested this model and consistently

demonstrated that experiencing various negative and frustrating events in the workplace

is consistently associated with an increase in CWB, or intention to engage in future

CWB, and that this relationship is mediated by negative affect (Chen & Spector, 1992;

Fox & Spector, 1999; Penney & Spector, 2002; Storms & Spector, 1987; Spector, 1975, 1978).

In order to explicate the relationship theorized in the model of Organizational Frustration, Fox and Spector (1999) conducted a study and surveyed 185 American employees from a variety of industries about experiencing frustrating events at work (in the form of job constraints), negative affect, and CWB. Firstly, it was found that number of frustrating experiences at work was positively correlated with CWB ($r = .36, p < .001$), and negative affect in the forms of anger ($r = .26, p < .001$) and frustration ($r = .54, p < .001$). Secondly, it was found that negative affect was positively correlated with CWB for both anger ($r = .59, p < .001$) and frustration ($r = .35, p < .001$). Lastly, using path analysis to analyze their results, they found the standardized path coefficient between frustrating workplace experience and negative affect (frustration) to be .42, which in turn, resulted in a standardized path coefficient of .11 to CWB. Taken together, these results support the proposition that affect mediates the relationship between frustrating experiences at work and increases in self-reported CWB.

Although there are an endless number of scenarios that might result in an individual having a negative or frustrating experience at work, one common workplace occurrence that is typically considered to be negative, is receiving feedback on one's job performance. It is well documented that employees often report feelings of dread and anxiety when receiving performance feedback (Ilgen & Davis, 2000; Ilgen, Fisher, & Taylor, 1979). Further, research has shown that people react to receiving performance feedback in different ways and that the nature of the feedback one receives can have an

influence on various types of workplace behaviours, including CWB (Belschak & Den Hartog, 2009; Ilgen & Davis, 2000; Kluger & DeNisi, 1996).

Present Study

The goal of the present study is to evaluate the involvement of resilience in the relationship between reactions to performance feedback and engaging in CWB. This will be done by following up on the work of Belschak and Den Hartog (2009), in both a theoretical and methodological fashion. More specifically, the present study will examine to what extent, if any, the three self-regulatory components of resilience moderate the established relationship between receiving negative performance feedback and future intentions to engage in CWB, as mediated by negative affect. As such, the relevant literature regarding performance feedback and resilience will be discussed.

Performance Feedback

For some time now, researchers have recognized the importance of providing individuals with feedback on their behaviour at work (Ilgen, et al., 1979; Ilgen & Davis, 2000). Providing employees with regular and detailed feedback has been found to be an important part of motivational and goal-setting processes (Locke & Latham, 2002). A direct corollary of this is that feedback can be used by employers to help shape the nature and frequency of desired work-related behaviours; this includes, but is not limited to, those related to job performance (Becker, 1978; Kluger & DeNisi, 1996; Locke & Latham 2002). Unfortunately, however, receiving feedback is not always a positive experience, nor does it always lead to positive (behavioural) outcomes (Ilgen et al, 1979; Kluger & DeNisi, 1996; Kluger & DeNisi, 1998).

According to a meta-analysis by Kluger and DeNisi (1996) the majority of workplace interventions that seek to improve performance through providing employees with more, or different kinds of, performance feedback do yield the desired results. However, over 33% of such performance feedback interventions actually result in a decrease in employee performance. Kluger and DeNisi (1996) suggest that many researchers have placed undue faith in the positive benefits of feedback and subsequently overlook the important, and often unintended, negative impact that feedback can have on workplace behaviour.

Although feedback in the workplace can take many shapes and forms, be it comments from clients, peers or supervisors, perhaps the most prominent and ubiquitous type of feedback in the workplace comes in the form of (annual) performance reviews. Performance reviews are an opportunity for supervisors, peers, and ultimately the organization itself, to provide feedback to employees regarding their performance (Murphy & Cleveland, 1995). Whether they are used for administrative or developmental purposes, formal performance reviews can have a variety of important implications for employees with regards to both their personal and professional lives. A positive performance review could lead to a raise, a promotion, opportunities for training and personal development, et cetera whereas a negative performance review could lead to being put on work probation, a demotion, or even being fired, among other unpleasant consequences (Cleveland, Murphy & Williams, 1989). It should come as no surprise then, that due to the potentially life-altering implications that performance reviews can have, many employees consider them to be a negative and unpleasant experience which causes anxiety, frustration, and disappointment (David, 2013; Ilgen & Davis, 2000).

Based on the model of Organizational Frustration (Fox & Spector, 1999; Penney & Spector, 2002; Spector, 1975, 1978), and predicated on the idea that performance reviews can be a negative experience (Ilgen & Davis, 2000), Belschak and Den Hartog (2009) conducted two studies to assess whether or not individuals who considered receiving performance feedback a negative experience would engage in CWBs in the future, and the extent to which negative affect mediated this relationship. In their first study, data were collected from 240 business students and 107 employees from a variety of companies and industries. Participants were assigned to one of two conditions and given a vignette to read outlining a scenario wherein they were told to pretend they received either positive or negative feedback following a performance appraisal. After reading the vignettes, participants completed measures assessing future intentions to engage in CWB and both positive and negative affect. This study found significant main effects for type of feedback (positive vs. negative) on intentions to engage in CWB in both the student ($F(1,196) = 26.36, p < .01, \eta^2 = .12$) and employee samples ($F(1,81) = 24.34, p < .01, \eta^2 = .24$). Subsequent analyses revealed that in both samples, intentions to engage in CWB were highest amongst those who received negative feedback. Furthermore, it was also found that specific components of negative affect (anger and frustration) mediated the relationship between type of feedback received and intentions to engage in CWB in both the student and employee samples.

Belschack and Den Hartog (2009) also conducted a follow-up study that found a similar pattern of results. Participants were asked to recall the emotions they felt after their most recent performance review and the extent to which they had engaged in CWB since that time. This study also found that specific components of negative affect (i.e.,

anger and frustration) mediated the relationship between type of feedback received and the extent to which participants engaged in CWB.

The results of the studies by Bleschak and Den Hartog (2009) demonstrate that individuals who receive negative feedback following a performance review are more likely to engage in CWBs, and that this relationship is mediated by the negative emotions elicited by this process. These findings are in line with, and provide further support for, the model of Organizational Frustration, and ultimately the process by which Spector and colleagues suggest CWB occurs (Fox & Spector, 1999; Penney & Spector, 2002; Spector, 1975, 1978); King and Rothstein (2010), however propose that it is resilience that is the primary mechanism responsible for determining how an individual might cope with, and respond to, negative workplace experiences.

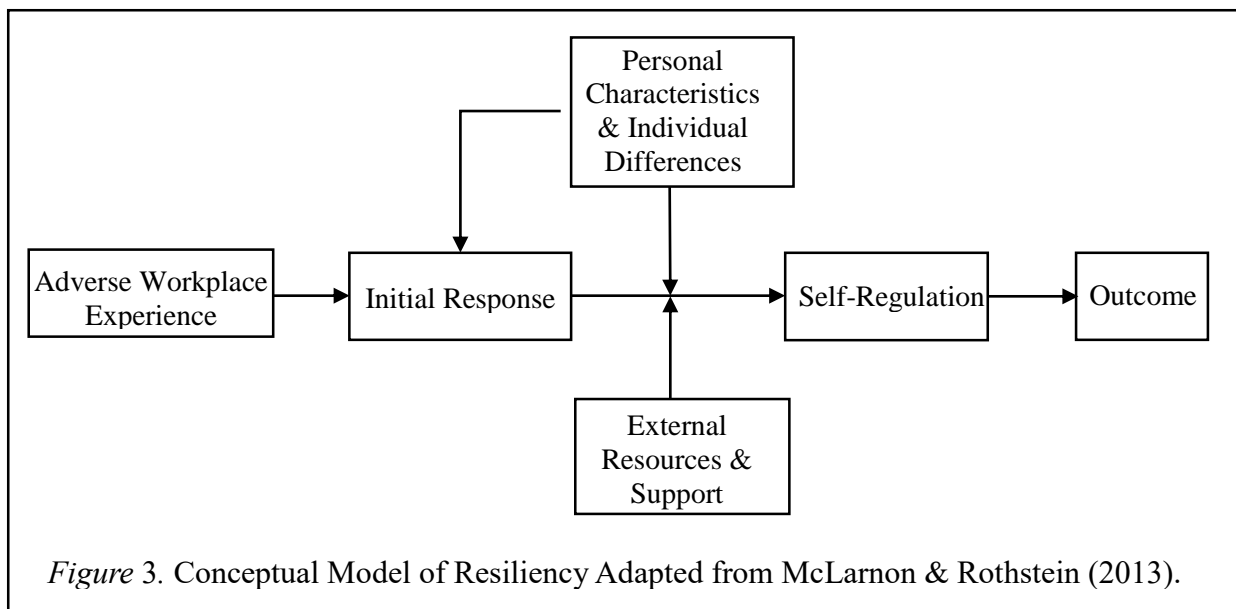
Resilience

Broadly speaking, resilience refers to a process by which an individual deals with adverse experiences (King & Rothstein, 2010; McLarnon & Rothstein, 2013). The King and Rothstein (2010) model of resilience suggests that the extent to which an individual is resilient should have an influence on how they respond to a negative workplace experience, both mentally and physically (McLarnon & Rothstein, 2013).

Unlike other models of resilience, such as the Psychological Capital model (Luthans, Vogelgesang, & Leester, 2006), the King and Rothstein (2010) model proposes that resilience is a multi-dimensional, not a unidimensional, construct, giving it a broader scope. The King and Rothstein model (2010) recognises that although recovering from an adverse experience is largely an individual process, there are external contextual factors, such as the available support from others, that contribute to one's recovery from an

adverse experience. It is recognized in the resilience literature that external and contextual factors contribute to the recovery from an adverse experience (Uchino, Cacioppo, & Kiecolt-Glaser, 1996; Fava & Tomba, 2009), as such a multi-dimensional model, like the King and Rothstein (2010), model is favoured over a unidimensional model, like the Psychological Capital model (Luthans et al., 2006).

As argued by King and Rothstein (2010), resilience is a multifaceted construct with both trait and state-like components (see Figure 3. for a summary; McLarnon & Rothstein, 2013).



The trait-like components of resilience include: personal characteristics and external resources. Personal characteristics is comprised of three components: affective characteristics, behavioural characteristics and cognitive characteristics. Affective characteristics describe an individual's overall emotional state of well-being and self-esteem. Behavioural characteristics describe traits pertaining to an individual's ambition and control of their own behaviour. Lastly, cognitive characteristics describe traits pertaining to knowledge seeking, openness to experiences, attaching meaning to events

and present awareness. Similarly, external resources describes the support available from external sources such as friends, family, coworkers, etc.

The state-like components of resilience include self-regulatory processes and initial responses. Much like personal characteristics, self-regulatory processes is also comprised of three components: affective self-regulation, behavioural self-regulation and cognitive self-regulation. Affective self-regulation refers to one's awareness and management over their emotions and related decision making. Behavioural self-regulation refers to management of one's self-control, personal discipline, and preparedness. Lastly, cognitive self-regulation refers to one's management over maladaptive thinking, optimism (or lack thereof), and being an open minded thinker. Similarly, initial response refers to the immediate understanding of, reaction to, and processing of an adverse event (King & Rothstein, 2010; McLarnon & Rothstein, 2013).

Much like Spector and colleagues (Fox & Spector, 1999; Penney & Spector, 2002; Spector, 1975, 1978), the King and Rothstein (2010) model of resilience outlines the process an individual goes through following an adverse (workplace) experience. In the context of the workplace, adverse experiences can include anything such as being fired, failing to meet a deadline or even receiving negative performance evaluation. According to the model, after experiencing an adverse workplace event some individuals experience a (negative) change in well-being. The extent to which they experience this change in well-being will be influenced by their personal characteristics and what external resources (i.e., Social relationships such as friends and family) they have available to them. Next, to the extent that an individual is able to self-regulate, as

influenced by their present state of well-being, they will in turn engage in some kind of cognitive, affective and or behavioural outcome.

This process (as summarized in Figure 3.; McLarnon & Rothstein, 2013) largely parallels the way in which Spector and colleagues (Fox & Spector, 1999; Penney & Spector, 2002; Spector, 1975, 1978) propose CWB occurs. However, generally speaking this model implies that it is one's ability to self-regulate that determines how, and to what extent, one will engage in outcome behaviours, perhaps even CWB.

In a study on the relationship between the Psychological Capital model of resilience, workplace attitudes, and behaviours, Avey, Luthans, and Youssef (2009) reported a correlation of $r = -.50, p < .05$ between CWB and resilience, as measured by the Psychological Capital measure. Two of the subscales found in the Psychological Capital measure of resilience are hope and optimism, both of which are represented in the description of the cognitive self-regulatory processes. Although not precisely the same as cognitive self-regulatory processes, the results of this study provide some insight into how control over cognitive functions may relate to, and influence, CWB. These results seem to suggest that if an individual were capable of controlling their cognitive processes such that they engaged in more positive types of thinking (i.e. being hopeful and more optimistic), this may serve to reduce the amount of CWB they would engage in.

Although the work by Belschack and Den Hartog (2009), Avey, Luthans and Youssef (2009) suggest ways in which affect and cognitive regulation may stand to influence CWB, neither of these two lines of work touch on how on regulating behaviour may influence CWB. According to Marcus and Schuler (2004), all antecedents of CWB can be organized into one of four categories, individual differences, external influences,

motivation, and internal control. Based on a theory originating in criminology which posits that all deviant behaviour (which includes CWB) is a result of an individual's lack of self-control, Marcus and Schuler (2004) proposed that the most important category of CWB antecedents is that of self-control. The results of their study supported this argument as not only did they find that self-control was highly correlated with CWB ($r = -.63, p < .05$), when entered last into a hierarchical regression containing variables associated with each of the other three categories of CWB antecedents, self-control accounted for 24% incremental variance in the prediction of CWB over and above the other antecedent variables. This implies that the degree to which an individual is capable of controlling themselves should be reflected in the extent to which they (intend to) engage in CWB.

Given the similarity between the models of Organizational Frustration (Fox & Spector, 1999; Penney & Spector, 2002; Spector, 1975, 1978;) and Resilience insofar as they both aim to explain how and why individuals react to adverse workplace experiences, it is not unreasonable to propose that there may be some cross over between these two models. Taking into consideration the findings of Belschak and Den Hartog (2009), Avey et al.(2009), Marcus and Schuler (2004), the work of Spector and colleagues (Fox & Spector, 1999; Penney & Spector, 2002;Spector, 1975, 1978) and the way in which the King and Rothstein (2010) model defines, and presents, the involvement of the self-regulatory component of resilience in relation to outcome behaviours, it is hypothesized that:

Hypothesis 1: The degree to which one engages in affective self-regulation will moderate the relationship between receiving negative performance feedback and future

intentions to engage in CWB as mediated by negative affect. Furthermore, the strength of the mediation will be weaker to the extent that affective self-regulation is high.

Hypothesis 2: The degree to which one engages in behavioural self-regulation will moderate the relationship between receiving negative performance feedback and future intentions to engage in CWB as mediated by negative affect. Furthermore, the strength of the mediation will be weaker to the extent that behavioural self-regulation is high.

Hypothesis 3: The degree to which one engages in cognitive self-regulation, will moderate the relationship between receiving negative performance feedback and future intentions to engage in CWB as mediated by negative affect. Furthermore, the strength of the mediation will be weaker to the extent that cognitive self-regulation is high.

Additionally, Spector and colleagues (Chen & Spector, 1992; Fox & Spector, 1999; Penney & Spector, 2002; Storms & Spector, 1987; Spector, 1975, 1978) suggest that it is the decisions made as a consequence of the emotions brought on by the negative experiences at work that lead an individual to engaging in CWB. As such, it logically follows that it is the degree to which one engages in self-regulatory processes following the negative reaction that ought to mitigate the extent to which an individual engages in CWB. This, in accordance with the King and Rothstein (2010) model, suggests that in the context of the present study, that the moderating effect of self-regulatory processes should be examined on the link between affect and CWB.

Methods

Participants

Participants for this study were recruited through an online survey and data collection system run by Amazon.com called Mechanical Turk (MTurk). Studies have shown that the quality of data collected through MTurk is not substantially different from data collected by more 'traditional' means (Buhrmester, Kwang, & Gosling, 2011; Casler, Bickel, & Hackett, 2013). Furthermore, it has also been suggested that using an online data collection system such as MTurk in favour of collecting data from a strictly student sample, may result in a more externally valid study (Aguinis & Bradley, 2014; Aguinis & Lawal, 2012).

According to research by Spector and Zhou (2013) and Bowling and Burns (2015), gender has been found to moderate the relationship between a variety of predictors and CWB. According to these two studies not only do men report engaging in more CWB than women, but the predictor-CWB relationship is also typically stronger for men than it is for women. The above research suggests a need to study predictor-criterion relationships separately for males and for females. Insofar as selecting one gender for the first step in this process, it makes the most sense to use males because of the greater propensity for males to engage in these behaviours.

Initially, a total of 436 participants were recruited for this study; however, in order to qualify for the study, participants had to be employed, either part-time or full-time, and male. After removing participants who did not fully qualify for the study ($n = 25$), those who failed to correctly answer content questions ($n = 50$) and careless responders ($n = 69$), 292 participants remained; content knowledge checks and careless responding assessments will be explained in greater detail later in both the methods and results section. All participants were male and employed either full-time (88%) or part-

time (12%). The age of participants ranged between 19 and 77 years old ($M = 33.14$, $SD = 10.00$) and 50.7% of participants identified themselves as working in either middle or upper management whereas the remaining 49.3% of participants identified themselves as entry level employees. Additionally, 94% of participants reported having experience with undergoing a formal performance evaluation of some kind and 77.5% of participants indicated that they themselves have had to either conduct performance evaluations or provide another employee with feedback on their job performance. All participants were compensated for their time.

Materials

Demographics. Participants were asked to report age, gender, employment status, job type, and industry, as well as experiences with formal performance assessments, as reported above (See Appendix A).

Performance Feedback. Aguinis and Bradley (2014) espouse the use of vignettes in studies wherein researchers seek to examine processes and outcomes relating to variables that might be difficult or unethical to otherwise manipulate. As such, in accordance with both the work by Aguinis and Bradley (2014) and previous research that is similar in nature to the present study (Belschak & Den Hartog, 2009), vignettes were used to present participants with information regarding performance feedback.

The vignettes used in the present study were adapted from the vignettes that were developed by Belschak and Den Hartog (2009). Participants were presented with one of two scenarios (one positive and one negative) where they were asked to imagine that they have just received an annual performance review at work (see Appendix B). In the scenario they were told that as part of the follow up on their performance review, their

supervisor tells them that they have performed either very well or very poorly this year. Additionally, participants were also told that their supervisor now considers them to be amongst either the top, or bottom, performers in the workplace.

Affect. In order to measure positive and negative affect, participants were asked to complete the 20-item, self-report, Positive and Negative Affect Schedule (PANAS; Appendix C; Watson, Clark & Tellegen, 1988). Participants responded to items in this measure using a 5-point Likert scale ranging from 1(*very slightly or not at all*) to 5(*extremely*). For example, an item from the positive affect subscale asks participants “*to what extent do you presently feel inspired?*” Watson et al. (1988) found that the internal consistency of the two subscales ranged between .84 and .90. In addition, they also provided evidence in support of the measure’s validity.

Intentions to Engage in Counterproductive Work Behaviour. In order to assess intentions to engage in CWB, participants were asked to complete a slightly modified version of Spector et al.’s (2006) 45-item, self-report measure of CWB (Appendix D). Items on this measure were adjusted to assess a participants’ future, as opposed to present, intention to engage in various CWBs. Participants responded to items in this measure using a 5-point frequency scale with response options ranging from 1 (*never*) to 5 (*every day*) in order to assess how often they intend to engage in specific CWBs. This measure contains two subscales (individually and organizationally directed CWBs) and measures five specific categories of CWBs: sabotage, withdrawal, production deviance, abuse and theft. For example, an item from the organizationally directed CWBs asks participants “*Would you purposely waste your employer’s materials/supplies?*”

Spector et al. (2006) found the internal consistency of the two subscales ranged from .84 to .85 and provided evidence in support of the measure's validity.

Self-Regulatory Components of Resilience. In order to measure the three self-regulatory components of resilience, participants were asked to complete McLarnon and Rothstein's (2013) Workplace Resilience Inventory (WRI; Appendix E). A total of 23 self-report items are used to assess the three subscales: affective¹, behavioural and cognitive self-regulatory processes. Participants responded to items in this measure using a 5-point Likert scale ranging from 1(*strongly disagree*) to 5(*strongly agree*). Due to the situational specificity of the present study, the items found in the self-regulation subscales were adjusted to reflect a future orientation and specifically refer to the scenarios participants were asked to read about in the vignettes they were presented with. For example, an item from the cognitive self-regulatory processes subscale asked participants "*Since receiving feedback on my performance I am more likely to question my ability to do my work properly*". McLarnon and Rothstein (2013) found the internal consistency of the three subscales assessing self-regulatory processes ranged between .76 and .86 and also provided evidence in support of the measure's validity.

Careless responding and Additional Questions. Participants were also asked a few additional questions regarding the content of the vignettes they had read in order to help assess data quality. Participants were asked "*In the scenario you were presented with at the start of the study, what type of feedback were you told you received?, Positive feedback, Neutral feedback, Negative feedback or I don't remember*" (See Appendix G).

¹ Due to an administrative error, only four of the five items from the affective self-regulatory processes subscale were administered. The omitted item was very similar in content and wording to the four remaining items and read "I am more likely to plan my life logically and rationally".

Similarly, they were also asked “In the paragraph you were presented with earlier on in the study, what was it you were told you were receiving feedback on?” and were asked to respond by selecting any one of: “*your attitude towards work, your attendance at work, your job performance, your ability to get along with your co-workers*” (See Appendix G). Additionally, participants were also asked “*Do you believe you were able to successfully get yourself into mindset of the individual described in the scenario?*” (See Appendix G).

Lastly, based on the recommendations made by Meade and Craig (2012), participants were asked to complete three directed-response items to assess careless responding. Participants responded to each item using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Participants were told to please respond either ‘*strongly disagree (1)*’, ‘*neither agree nor disagree (3)*’ or ‘*strongly agree (5)*’ to this item; failing to do so indicated that a participant was responding carelessly. Finally, at the end of the questionnaire participants were asked to respond “yes” or “no” to the question “*The data being collected in this study is incredibly important to the researchers conducting the study. In your honest opinion, should we use your data in our analyses in this study*”. All participants who responded “no” to this question, or incorrectly answered any of the three previously mentioned careless responding items and three content items (See Appendix F), were deemed to be careless responders and were subsequently removed from the analyses in this study.

Procedure

Participants signed up online to complete the study and in doing so implied consent. After reading a letter of information, participants began to complete the questionnaire which contained the various measures presented in a fixed order.

A fixed order was used in order to accommodate the situational specificity and temporal nature of part of the resilience measure and the complete CWB measure. In order for participants to meaningfully respond to large portions of these measures, it was necessary for them to first read the vignette they were assigned to. The second reason for using a fixed order was to reduce potential priming and carry over effects from one measure to another due to the nature and content of certain items. As such, a fixed order was selected which was believed would best mitigate against these potentially harmful effects and would simultaneously accommodate the need to have certain measures come after the vignettes.

First, participants were asked to provide demographic information. Next, participants were randomly assigned to one of two conditions (positive or negative performance feedback) and were presented with a vignette that corresponded with the condition to which they were assigned. Participants were then instructed to read the vignette and respond to all remaining questions in the study as if they were the individual who had just received feedback on their performance (See Appendix B). Throughout the remainder of the study, participants were regularly reminded of these instructions and the nature of the feedback they were told they had received. After reading the vignettes participants completed measures of positive and negative affect, intentions to engage in CWB, and the subscales from the measure of resilience (affective, behavioural, and cognitive self-regulatory processes). This specific order was selected to help capture the affective reaction participants had to the vignette they were assigned to and to help capture the intended influence of affect on the way participants' responded to the subsequent measures; it was most important that this priming effect influence responses

to the CWB measure, therefore the CWB measure was presented before the measure of resilience. Lastly, participants were asked to answer questions pertaining to the content of the vignettes as part of assessing careless responding. Upon completing the survey, participants received their compensation (\$1 USD) and were debriefed.

Results

Manipulation check

As previously mentioned, a total of 50 participants were removed from the sample prior to analyses due to either having responded ‘no’ to the question “*Do you believe you were able to successfully get yourself into mindset of the individual described in the paragraph you were asked to read?*” or having incorrectly answered one or more questions pertaining to the nature and type of feedback they were provided with in the vignette they were asked to read. This was done in order to ensure only participants who responded to the items in the questionnaire as though they were the individual receiving the feedback were included in the analyses.

Additionally, in order to assess whether or not participants experienced a change in negative affect as a result of being assigned to either the positive or negative feedback condition, the mean negative affect score of participants who received positive feedback ($M = 1.34, SD = 0.58$) was compared to the mean negative affect score of participants who received negative feedback ($M = 2.70, SD = 1.05$). It was found that participants who were assigned to the negative feedback condition reported significantly more negative affect than those who were assigned to the positive feedback condition, $t(290) = 13.78, p < .001, d = 1.60$, implying that the feedback manipulation was successful.

Findings

The means, standard deviations, correlations, and Cronbach's alphas (found in the parentheses along the diagonals) for each of the main variables in this study are reported in Table 1.

Table 1.
Means, standard deviations, and correlations of study variables

Variable	Mean	SD	1	2	3	4	5	6
1.CWB	1.31	0.46	(.94)					
2.Feedback	0.49	0.50	.11	(1)				
3.NA	2.00	1.08	.32**	.63**	(.95)			
4.SRP-A	3.66	0.75	-.35**	-.13*	-.26**	(.74)		
5.SRP-B	3.65	0.61	-.56**	-.13*	-.27**	.63**	(.75)	
6.SRP-C	3.54	1.00	-.38**	-.55**	-.63**	.44**	.52**	(.93)

Note. $N = 289-292$. Cronbach's alpha reliabilities are in the parentheses along the diagonals. Feedback = Feedback Type (1= Negative Feedback, 0 = Positive Feedback), NA = Negative Affect, SRP-A = Affective Self-Regulatory Processes, SRP-B = Behavioural Self-Regulatory Processes, SRP-C = Cognitive Self-Regulatory Processes.

* $p < .05$

** $p < .01$

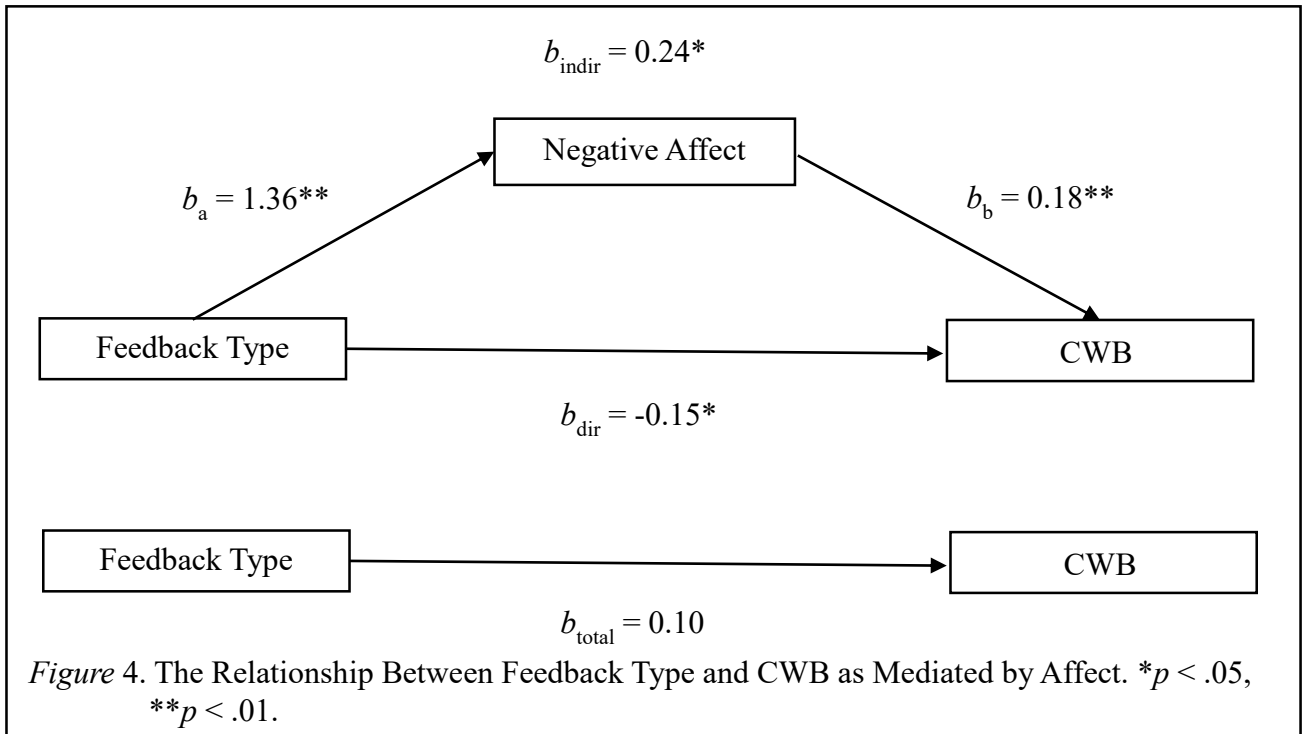
In order to assess hypotheses wherein the strength of a mediational relationship is contingent upon the level of an intervening variable, one must conduct a moderated mediation. In cases where an independent variable is dichotomous Hayes (2009) recommends the use of unstandardized over standardized variables; accordingly all results pertaining to mediation analyses will be reported in terms of unstandardized regression coefficients. Following the guidelines and procedures outlined by Preacher, Rucker, and Hayes (2009), before any of the hypotheses that proposed conditional effects on the relationship between feedback and CWB, as mediated by negative affect, could be

assessed, it was first necessary to assess whether or not the base mediational relationship could be reproduced in the present study. The base mediational relationship was the relationship between feedback and CWB as mediated by negative affect.

Using the bootstrapping method, as recommended in Preacher and Hayes (2004), 95% confidence intervals were constructed based on 10 000 bootstrapped samples (created using the *PROCESS macro* syntax for SPSS; Hayes, 2009; Preacher, Rucker & Hayes, 2007) in order to estimate the size of the indirect effect of the predictor (X) on the criterion (Y), through the mediating variable (M); that is, the product of the X on M and M on Y relationships. According to Preacher and Hayes (2004), a confidence interval for the estimate of the indirect effect of the X on Y, through M, that does not contain 0 can be considered evidence of a significant indirect effect as well as evidence of mediation.

First and foremost, with regards to the mediation analysis, it was found that the total effect of feedback type (negative feedback = 1, positive feedback = 0) on CWB, which is the combined value of the direct and indirect effects, was $b_{\text{total}} = 0.10$, $p = .07$ and therefore not significant. Likewise, it was found that the correlation between feedback type and CWB was $r = .11$, $p < .07$ and therefore also not significant. Next the indirect effect of feedback type on CWB through negative affect was examined and it was found to be $b_{\text{indir}} = 0.24$ (C.I. = .13 to .39). This is supported by the fact that both the correlations between feedback type and negative affect ($r = .63$, $p < .01$), and negative affect and CWB ($r = .32$, $p < .01$) were also significant. Subsequently, the direct effect, which is the total effect minus the indirect effect, was found to be $b_{\text{dir}} = -0.15$ ($p = .02$). According to Kline (2011), since the relationships between feedback type and CWB, feedback type and negative affect, and negative affect and CWB were all positive, there

is sufficient evidence to suggest this negative direct effect is a result of negative suppression effect. The implications and nature of this finding will be elaborated on further in the Discussion. Given that the confidence interval for the indirect effect did not contain 0, it was deemed statistically significant and therefore evidence that negative affect mediates the relationship between feedback type and CWB. A summary of the findings pertaining to the mediation analysis are presented in Figure 4.

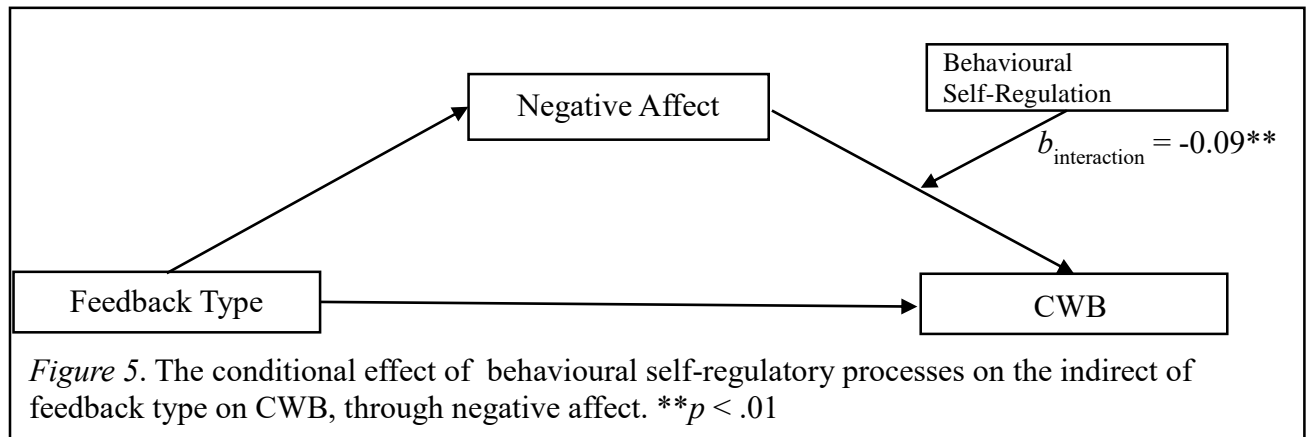


Hypothesis 1, 2 and 3 predicted that affective, behavioural, and cognitive self-regulatory processes, respectively, would moderate the relationship between feedback type and CWB, as mediated by affect. Specifically, it was predicted that to the extent that each of affective, behavioural, and cognitive self-regulatory processes were high, the indirect relationship between feedback type and CWB, through affect, would be weaker. In order to assess each of these three hypotheses, the moderated mediation *PROCESS*

macro syntax for SPSS was used (Hayes, 2009; Hayes, 2015; Preacher & Hayes, 2004; Preacher et al., 2007).

Hypothesis 1 was that affective self-regulatory processes would moderate the relationship between feedback type and CWB, as mediated by negative affect. The results of the study found no conditional effect for affective self-regulatory processes on the indirect effect of feedback type on CWB through negative affect ($b_{\text{interaction}} = -0.05$, $p = .06$), therefore Hypothesis 1 was not supported.

Similarly, Hypothesis 2 was that behavioural self-regulatory processes would moderate the relationship between feedback type and CWB, as mediated by negative affect. It was found that there is a significant conditional effect for behavioural self-regulatory processes on the indirect effect of feedback type on CWB through negative affect ($b_{\text{interaction}} = -0.09$, $p < .01$; summarized in Figure 5.). Figure 6 is a two-dimensional



graphical representation of the conditional effect of behavioural self-regulatory processes on the indirect effect of feedback type on CWB through negative affect. Specifically, it was found that at higher levels of behavioural self-regulatory processes (1 SD above the mean), the indirect effect of feedback type on CWB through negative affect was weaker ($b_{\text{indir}} = 0.07$) and at lower levels of behavioural self-regulatory processes (1 SD below

the mean), the indirect effect of feedback type on CWB through negative affect was stronger ($b_{\text{indir}} = 0.22$), therefore Hypothesis 2 was supported.

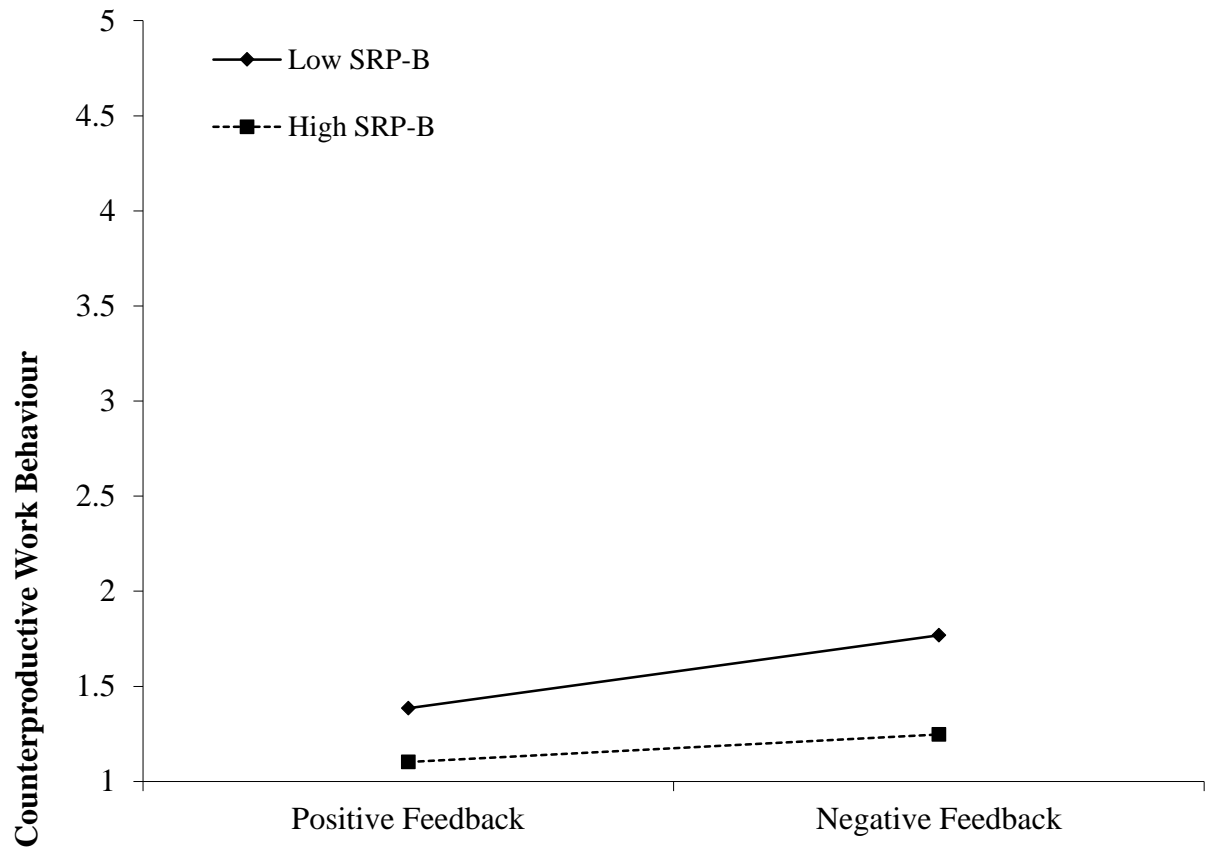


Figure 6. A graphical representation of the conditional effect of behavioural self-regulatory processes (SRP-B) on the indirect relationship between feedback type and CWB through negative affect.

Lastly, Hypothesis 3 was that cognitive self-regulatory processes would moderate the relationship between feedback type and CWB, as mediated by negative affect. The results of the study found no conditional effect for cognitive self-regulatory processes on the indirect effect of feedback type on CWB through negative affect ($b_{\text{interaction}} = 0.02$, $p = .36$), therefore Hypothesis 3 was not supported.

Discussion

The primary goal of the present study was to investigate the potential involvement of resilience in the established relationship between receiving negative feedback and engaging in CWB, known to be mediated by negative affect. Based on the model of Organizational Frustration by Spector and colleagues (Spector, 1975, 1978; Fox & Spector, 1999; Penney & Spector, 2002) which aims to explain how and why people engage in CWB, and the King and Rothstein (2010) model of workplace resilience which aims to explain how people handle adverse experiences in the workplace, it was proposed that the self-regulatory component of resilience may function as a moderator of this mediated relationship.

First, although not specifically hypothesized, it was established that the results of the present study replicate the general findings of previous studies such as Chen and Spector (1992), Fox and Spector (1999) and Belschak and Den Hartog (2009). That is, the findings of the present study provide additional support for the notion that individuals who go through negative or frustrating experiences at work (including negative performance appraisals) are more likely to engage in greater amounts of CWB and that this relationship is mediated by negative affect.

That being said, there is one notable difference between the results of the present study and the results of the previous studies. The present study found a statistically significant, negative, direct effect between feedback type and CWB. This suggests that for individuals who did not experience substantial negative affect, receiving positive feedback was associated with greater intentions to engage in CWB. The reason the direct effect has a negative valence whereas the total effect has a positive valence is, according

to Kline (2011), a result of a negative suppression effect. A negative suppression effect occurs when the positive association between two variables becomes negative as a result of controlling for the variance associated with a third variable.

One speculative interpretation of this negative direct effect is that perhaps individuals who receive positive feedback believe they can get away with CWB because the positive feedback they are receiving suggests to them that they are held in high regard also resulting in an increased ego and sense of entitlement. This finding makes sense in the context of a meta-analysis by Girjalva and Newman (2015) who report that the corrected correlation between narcissism and CWB is $P = .32$. Conceptually, they argue that it is the egotistical, entitled, and exploitative nature of narcissists that drives them to engage in CWB. The results of this meta-analysis in conjunction with this line of reasoning support the finding that receiving positive feedback is associated with increased levels of CWB.

Turning to the findings pertaining to the hypotheses of the present study, it was firstly proposed that that affective self-regulatory processes would moderate the relationship between receiving negative performance feedback and CWB as mediated by negative affect. The proposed nature of the moderation was that when affective self-regulation is high, the strength of the mediated relationship (the indirect effect) would be weaker; however, no such relationship was found. Based on all of the evidence presented by Spector and colleagues (Chen & Spector, 1992; Fox & Spector, 1999; Penney & Spector, 2002; Spector, 1975, 1978) and Belschak and Den Hartog (2009) explicating the relationship between affect and CWB, it was fully expected that one's ability to control and manage their affective reactions in response to negative feedback would, as

hypothesized, moderate the mediated relationship at hand. One possible explanation as to why this proposed relationship did not work out is methodological error. As mentioned, an item from the affective self-regulation scale was accidentally omitted due to clerical error. Given how close to being significant these findings were it is not unreasonable to suggest that statistical significance may have been achieved had the omitted item been present.

Next, as predicted it was found that behavioural self-regulatory processes moderated the relationship between receiving negative performance feedback and CWB, as mediated by negative affect. The nature of the moderation suggests that the greater extent to which an individual engages in behavioural self-regulatory processes, the less CWB they will engage in after having a negative reaction to an adverse workplace experience, in this case receiving negative performance feedback. Given that behavioural self-regulation refers to an individual's personal discipline and ability to control their own behaviour (King & Rothstein, 2010; McLarnon & Rothstein, 2013) this suggests that the more control an individual is able to exert over their own actions, less likely they are to engage in CWB following an adverse workplace experience.

This finding makes sense in the context of two studies that have presented evidence to suggest that self-control, generally speaking, plays an important role in the degree to which individuals engage in CWB. As previously discussed, the work by Marcus and Schuler (2004) attempts to explicate the role of self-control in CWB. This, in addition to a study by Storms and Spector (1987) which has found that locus of control moderates the relationship between experiencing frustrating and negative events at work and engaging in CWB, seems to support the findings of the present study insofar as

suggesting that behavioural regulatory processes works to reduce the degree to which one will engage in CWB, at least in part, through the mechanisms of self-control.

Lastly, contrary to what was predicted based on the findings of Avey et al. (2009), cognitive self-regulatory processes was not found to be a moderator of the relationship between receiving negative performance feedback and CWB, as mediated by negative affect. To some extent, cognitive self-regulation refers to the degree to which an individual can control the intrusion of negativity and maladaptive thoughts into their thinking. As such, a review by Gross (2002) on the cognitive processing and regulation of (negative) emotions offers one plausible explanation as to why no significant moderation was found.

In his review, Gross (2002) argues that there are two dominant strategies that are used to regulate (negative) emotions, they are cognitive reappraisal and cognitive suppression. According to Gross (2002), cognitive reappraisal is used to regulate emotions by reinterpreting the situation causing the emotion as it occurs, or shortly thereafter, in such a way that it reduces any adverse impact it may have. On the other hand, cognitive suppression occurs by limiting the degree to which one cognitively attends to the undesirable emotion. This is thought to take place after an emotion-inducing situation is over and after one has identified and begun to experience the impact of the emotion. In the context of the present study, given that participants were asked to read a vignette describing a situation that has already occurred it is logical to suggest that any emotional regulation that may have occurred in this context would likely be in the form of cognitive suppression. Although both cognitive regulation strategies can influence how an individual behaviourally responds to the emotions they experience,

cognitive suppression is not an effective strategy for dealing with particularly negative emotions, relative to reappraisal strategies (Gross, 2002). As such it may be the case that in spite of an individual's ability to engage in cognitive self-regulatory processes, due to the cognitive mechanisms through which such a process might occur, one simply may not be effective at regulating the negative emotions experienced as a result of the nature of the experiment itself, which in turn may have resulted in no significant moderating effect.

Limitations

The present study is not without its limitations which must be kept in mind when interpreting the findings. First and foremost, this study was conducted using vignettes. Although this technique is highly praised by Aguinis and Bradley (2014), this methodology is limited in its generalizability given that participants are pretending to have experienced a fabricated situation they have been instructed to read about instead of actually experienced. However, as previously mentioned, for studies where it would be unethical to manipulate certain variables or elements of a situation (such as who receives positive and negative feedback), using a vignette based methodology is considered acceptable practice.

In a similar fashion, a second limitation of the study is that resilience and CWB were measured in terms of self-reported future behavioural intentions instead of self-reported past behaviours. For the measures assessing resilience and CWB, participants were asked to respond to measures indicating how they would, in future, behave, instead of asking about how they have, in the past, behaved. It is difficult to say whether or not participants would actually behave the way they indicated they would if they were actually faced with a situation similar to the one outlined in the vignette they read. The

psychological reality of a situation is obviously different from the one evoked by a text-based description of a fictitious scenario, regardless of the level of detail and description (Aguinis & Bradley, 2014).

A third limitation to the study is that only males were used as participants. As previously mentioned, the studies by Bowling and Burns (2015), and Spector and Zhou (2013) present results suggesting that predictor-CWB relationships should be studied separately for males and females. Accordingly, as the present study focused on males, future research needs to investigate this topic in a sample of females.

Conclusions and Future Directions

Notwithstanding potential flaws and limitations that may be found in the present study, the results of this research have both theoretical and practical implications. First and foremost, results of the present study provide evidence to suggest that resilience, at least in the form of behavioural self-regulatory processes, may, in some capacity be involved in the relationship between receiving negative performance feedback and engaging in CWB, but perhaps only through the mechanisms of self-control. Although it is beyond the capacity of this study to make the bold claim that resilience should be made part of the Organizational Frustration framework, the present study certainly serves as a first step in evaluating the degree to which resilience is involved in that framework.

In future, researchers wishing to further evaluate the nature of, and degree to which, resilience is involved in this process, ought to give consideration to the other components of resilience (Initial Response, Personal Characteristics, and External resources) and how they may fit into the Organizational Frustration framework insofar as influencing the degree to which one engages in CWB.

Along the same lines, a second potentially fruitful direction future researchers may wish to consider is the possible influence of individual differences on the relationships examined in this study. The model of workplace resilience proposed by King and Rothstein (2010) implies that personality and other such individual differences can contribute to the resilience process and related outcomes. Likewise, the extant body of literature on CWB clearly demonstrates that individual differences such as integrity, self-control, and various personality traits, such as emotional stability, agreeableness, psychopathy, and Narcissism, are related to CWB and can account for a substantial portion of the variance in its prediction (Berry et al., 2007; Girjalva & Newman, 2015; Marcus, Lee & Ashton, 2007; Marcus & Schuler, 2004; O'Boyle et al., 2012). As such, it is reasonable to believe that personality and other such individual differences may be involved in the process of engaging in CWB as described in the Organizational Frustration framework (Fox & Spector, 1999; Penney & Spector, 2002; Spector, 1975, 1978) in some capacity and future research on this topic ought to consider its potential influence.

On a more practical note, the results of this study imply that in certain situations, individuals higher on certain elements of resilience are less likely to engage in CWB than others. When considered in the context of an applied setting, such information can be used to serve as the basis for workplace interventions aimed at reducing CWB in the workplace. There is preliminary evidence suggesting that, generally speaking, training programs can be used to develop resilience in employees (Luthans & Lester 2006). As a result, CWB might be indirectly reduced as a by-product of training employees in order to develop their levels of personal resilience. An intervention aimed at increasing

employee resilience would also directly benefit the employer and the employees in other ways, as it has been reported that greater levels of resilience are associated with reduced turnover intentions and reduced levels of job stress, increased levels of organizational citizenship behaviours, happiness, job satisfaction, optimism and organizational commitment (Avey et al., 2009; Avey, Luthans, & Jensen, 2009; Youssef & Luthans, 2007). Given the extensive costs associated with CWB in terms of both productivity and financial loss (Camara & Schneider, 1994; Young, 2010) employers would stand to benefit from implementing an intervention aimed at increasing employee resilience not only in terms of reducing the impact of CWB but in terms of generally benefiting their employees as well.

In conclusion, the results of the present study further underline the findings of previous work by Chen and Spector (1992), Fox and Spector (1999), Belschak and Den Hartog (2009) insofar as providing additional evidence to support the claim that negative affect mediates the relationship between experiencing negative or frustrating events at work (such as receiving feedback on one's job performance) and engaging in CWB. In addition, the results of the present study expand on the current understanding of the mechanisms through which people engage in CWB by providing some evidence that resilience, in the form of behavioural self-regulation, is involved in the process of engaging in CWB as outlined by the Organizational Frustration framework (Fox & Spector, 1999; Penney & Spector, 2002; Spector, 1975, 1978).

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Appendix A

Demographics

For the questions in the following section, please provide a response or indicate which option best represents you where possible

- 1) Age _____
- 2) Gender
 - ☐ Male
 - ☐ Female
- 3) Are you presently employed?
 - ☐ Yes, Full time
 - ☐ Yes, Part time
 - ☐ No, I am not employed
- 4) Using the following scale, what best describes your position in the company you work for?

1	2	3	4	5
Entry level employee		Middle management		Upper management
- 5) Please select the industry that best reflects your work experience.
 - ☐ Accommodation and food services
 - ☐ Administrative and support services
 - ☐ Agriculture, forestry, fishing, and hunting
 - ☐ Arts, entertainment, and recreation
 - ☐ Construction
 - ☐ Educational services
 - ☐ Finance and insurance
 - ☐ Government
 - ☐ Healthcare and social assistance
 - ☐ Information
 - ☐ Management of companies and enterprises
 - ☐ Manufacturing
 - ☐ Mining, quarrying, and oil and gas extraction
 - ☐ Professional, scientific, and technical services
 - ☐ Real estate and rental and leasing
 - ☐ Retail trade
 - ☐ Self-employed

- ☐ Transportation and warehousing
- ☐ Utilities
- ☐ Other
 - If other, please specify? _____

6) How long have you worked at your current place of employment? _____

7) Have you ever worked in a supervisory role?

- ☐ No
- ☐ Yes

8) Have you ever had to evaluate an employee's job performance or give job performance feedback?

- ☐ Yes
- ☐ No

9) Have you ever had your performance rated at a job that you've held?

- ☐ Yes
- ☐ No

10) Approximately how many performance appraisals have you had in the past?

11) Using a scale from 1 to 10, please tell us approximately what level of performance rating you typically receive at work?

1	2	3	4	5	6	7	8	9	10
Extremely				Average					Extremely high
poor performance				performance					performance
rating				rating					rating

Appendix B

Vignettes

Instructions:

Please take your time and read the following paragraph. Imagine that you are the individual described in the paragraph below and that it is you who is receiving job performance feedback. Please take some time to think about how you might feel and what you might be thinking after receiving feedback of this nature. Please answer all remaining questions while imagining that it was you who received the feedback outlined in the paragraph below.

Positive

Following up on your annual performance review, your direct supervisor sends you a personal email telling you that you have been doing excellent work lately, and you are among the top performers in the department. Your supervisor also tells you in their e-mail that they are very happy with your performance.

Negative

Following up on your annual performance review, your direct supervisor sends you a personal email telling you that your work has not been up to standards lately and you have been making a lot of mistakes. Your supervisor also tells you in the e-mail that they are disappointed with your performance and that you are now considered to be among the poorest performing employees in the department.

Appendix C

Positive and Negative Affect Scale

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent *you feel this way right now, that is, at the present moment*. Use the following scale to record your answers.

1	2	3	4
5			
Very slightly Extremely or not at all	A little	Moderately	Quite a bit

Interested _____
 Distressed _____
 Excited _____
 Upset _____
 Strong _____
 Guilty _____
 Scared _____
 Hostile _____
 Enthusiastic _____
 Proud _____
 Irritable _____
 Alert _____
 Ashamed _____
 Inspired _____
 Nervous _____
 Determined _____
 Attentive _____
 Jittery _____
 Active _____
 Afraid _____

Appendix D

Future Oriented Counterproductive Work Behavior Checklist (CWB-C)

How often would you do each of the following things at your present job given the feedback you have just received?	Never	Once or Twice	Once or Twice per month	Once or twice per
1. Purposely waste your employer's materials/supplies	1	2	3	4 5
2. Daydream rather than did your work	1	2	3	4 5
3. Complain about insignificant things at work	1	2	3	4 5
4. Tell people outside the job what a lousy place you work for	1	2	3	4 5
5. Purposely do your work incorrectly	1	2	3	4 5
6. Come to work late without permission	1	2	3	4 5
7. Stay home from work and say you were sick when you aren't	1	2	3	4 5
8. Purposely damage a piece of equipment or property	1	2	3	4 5
9. Purposely dirty or litter your place of work	1	2	3	4 5
10. Steal something belonging to your employer	1	2	3	4 5
11. Start or continued a damaging or harmful rumor at work	1	2	3	4 5
12. Be nasty or rude to a client or customer	1	2	3	4 5
13. Purposely work slowly when things needed to get done	1	2	3	4 5
14. Refuse to take on an assignment when asked	1	2	3	4 5
15. Purposely arrive late to an appointment or meeting	1	2	3	4 5
16. Fail to report a problem so it would get worse	1	2	3	4 5
17. Take a longer break than you are allowed to take	1	2	3	4 5
18. Purposely fail to follow instructions	1	2	3	4 5
19. Leave work earlier than you are allowed to	1	2	3	4 5
20. Insult someone about their job performance	1	2	3	4 5
21. Make fun of someone's personal life	1	2	3	4 5
22. Take supplies or tools home without permission	1	2	3	4 5
23. Try to look busy while doing nothing	1	2	3	4 5
24. Put in to be paid for more hours than you worked	1	2	3	4 5
25. Take money from your employer without permission	1	2	3	4 5
26. Ignore someone at work	1	2	3	4 5
27. Refuse to help someone at work	1	2	3	4 5
28. Withhold needed information from someone at work	1	2	3	4 5
29. Purposely interfere with someone at work doing his/her job	1	2	3	4 5
30. Blame someone at work for error you made	1	2	3	4 5
31. Start an argument with someone at work	1	2	3	4 5
32. Steal something belonging to someone at work	1	2	3	4 5
33. Verbally abuse someone at work	1	2	3	4 5

34. Make an obscene gesture (the finger) to someone at work	1	2	3	4	5
35. Threaten someone at work with violence	1	2	3	4	5
How often would you do each of the following things at your present job given the feedback you have just received?	Never	Once or Twice	Once or Twice per month	Once or twice per	
36. Threaten someone at work, but not physically	1	2	3	4	5
37. Say something obscene to someone at work to make them feel bad	1	2	3	4	5
38. Hide something so someone at work couldn't find it	1	2	3	4	5
39. Do something to make someone at work look bad	1	2	3	4	5
40. Play a mean prank to embarrass someone at work	1	2	3	4	5
41. Destroy property belonging to someone at work	1	2	3	4	5
42. Look at someone at work's private mail/property without permission	1	2	3	4	5
43. Hit or push someone at work	1	2	3	4	5
44. Insult or made fun of someone at work	1	2	3	4	5
45. Avoid returning a phone call to someone you should at work	1	2	3	4	5

Appendix E

Workplace Resilience Inventory

Disagree strongly	Disagree	Neither agree nor disagree	Agree	Agree strongly
1	2	3	4	5
PC-A				
PC-B				
PC-C				
IR				
After receiving feedback on my performance I was more likely to:				
OSR				

4. I feel that there is somebody that I can talk to that will listen to my problems and concerns
5. I know that someone will make time for me if I need them

SRP-A

Since receiving the feedback on my performance I am more likely to:

1. Base my goals in life on feelings, rather than logic
2. Plan my life based on how I feel
3. Plan my life logically and rationally
4. Make important decisions based on logical reasoning
5. Make more decisions based on facts, not feelings.

SRP-B

Since receiving the feedback on my performance I am more likely to:

1. Overindulge
2. Jump into things quickly without thinking them through
3. Act on a whim
4. Make last-minute plans
5. Be a highly disciplined person
6. Refrain from doing things that may be bad for me in the long run, even if they might make me feel good in the short term.
7. Start tasks right away
8. Procrastinate from work
9. Need more of a push to get started on a project

SRP-C

Since receiving the feedback on my performance I am more likely to

1. Be discouraged easily
2. Be disappointed with my shortcomings
3. Look on the bright side
4. Have a dark outlook for the future
5. See potential difficulties everywhere
6. Question my ability to do my work properly
7. Be filled with doubts
8. Be afraid that I will do the wrong thing
9. Find it easy to control my thoughts

Appendix F

Careless responding

1) Please respond 'strongly disagree (1)' to the following item:

Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	2	3	4	5

2) Please respond 'neither agree nor disagree (3)' to the following item:

Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	2	3	4	5

3) Please respond 'strongly agree (5)' to the following item:

Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	2	3	4	5

4) Please note: Your response to the following question WILL NOT affect how much you get paid for completing this study.

The data being collected in this study is incredibly important to the researchers conducting the study, in your honest opinion, we should use your data in our analyses in this study?

- ☐ Yes
- ☐ No

Appendix G

Additional Questions

- 1) Do you believe you were able to successfully get yourself into mindset of the individual described in the scenario?

‘Yes’ ‘No’

- 2) In the paragraph you were presented with earlier on in the study, what type of feedback were you told you received?

- ☐ Positive Feedback
- ☐ Neutral Feedback
- ☐ Negative Feedback
- ☐ I do not remember

- 3) In the paragraph you were presented with earlier on in the study, what was it you were told you were receiving feedback on?

- ☐ Your attitude towards work
- ☐ Your attendance at work
- ☐ Your job performance
- ☐ Your ability to get along with your co-workers

- 4) Have you ever conducted a performance appraisal?

‘Yes’ ‘No’

- 5) In the scenario you were presented with at the start of the study, what type of feedback were you told you received?

‘Positive’ or ‘Negative’

Appendix H

Letter of Information

Project Title: Reactions to performance feedback in the workplace

Principal Investigator:

Dr. Richard Goffin, Industrial/Organizational Psychology, Western University

Co-Investigator:

Kabir Daljeet, Graduate student in Industrial/Organizational Psychology, Western University

Letter of Information

1. Invitation to Participate

You are being invited to participate in this research study regarding reactions to performance feedback in the workplace. Because you are a male and have work experience, you are qualified to participate in this study.

2. Purpose of the Letter

The purpose of this letter is to provide you with information required for you to make an informed decision regarding participation in this research.

3. Purpose of this Study

The purpose of this study is to achieve a greater understanding of how employees respond to performance feedback in the workplace.

4. Inclusion Criteria

Individuals who are male and are employed either part time or full time are eligible to participate in this study.

5. Exclusion Criteria

Individuals who are not employed and individuals who are not male are not eligible to participate in this study.

6. Study Procedures

If you agree to participate, you will be asked to read a paragraph about an individual receiving feedback on their job performance. Then, you will be asked fill out some questionnaires asking about how you would respond had you been the individual in the paragraph. Additionally, you will be asked to complete some questionnaires about your likes, dislikes, and typical behaviours. It is anticipated that the entire task will take approximately 30 minutes to complete over the duration of a single session.

7. Possible Risks and Harms

There are no known or anticipated risks or discomforts associated with participating in this study.

8. Possible Benefits

You may not directly benefit from participating in this study but information gathered may provide benefits to society as a whole which include developing a better understanding of how individuals behave in the workplace

9. Compensation

You will be compensated \$1 for your participation in this study. If you do not complete the entire study you will still be compensated at a pro-rated amount. If you complete at half the study you will receive \$0.50, if you complete a third or less of the study you will receive \$0.33.

10. Voluntary Participation

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on your future employment. If you choose to withdraw from the study, your compensation will be prorated based on the amount of the study you have completed.

11. Confidentiality

All data collected will remain confidential and accessible only to the investigators of this study. If the results are published, your name will not be used.

12. Contacts for Further Information

If you require any further information regarding this research project or your participation in the study you may contact the Principle Investigator Dr. Richard Goffin or Co-Investigator Kabir Daljeet.

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics.

13. Publication

If the results of the study are published, your name will not be used. If you would like to receive a copy of any potential study results, please contact Kabir Daljeet.

14. Consent

You indicate your voluntary agreement to participate by responding to the questions.

Appendix I

Debriefing Form

Reactions to performance feedback in the workplace: Debriefing

Thank you for your participation in our study. As previously mentioned, your responses will be used to better understand how employees react to different types of performance feedback in the workplace. Specifically, we are interested in finding out whether or not certain workplace behaviours called ‘counterproductive work behaviours’ (CWBs) are likely to increase after an individual receives negative performance-related feedback. Additionally, we are also interested in investigating to what extent certain individual differences, such as affect and resilience, might influence this relationship. Your participation in this study will contribute to developing a better understanding of both how people respond to negative feedback in the workplace and why people engage in CWBs at work.

For more information, you may wish to read:

Ilgen, D., & Davis, C. (2000). Bearing bad news: Reactions to negative performance feedback. *Applied Psychology*, 49(3), 550-565.

Spector, P. E. (1978). Organizational frustration: A model and review of the literature. *Personnel Psychology*, 31(4), 815-829.

Belschak, F. D., & Den Hartog, D. N. (2009). Consequences of positive and negative feedback: The impact on emotions and extra-role behaviors. *Applied Psychology*, 58(2), 274-303.

If you have any further questions about this study, you may contact Kabir Daljeet, or the project supervisor Dr. Richard Goffin.

Appendix J

Recruitment Email

Reactions to performance feedback in the workplace

Subject Line: Invitation to participate in research

You are being invited to participate in a study regarding reactions to workplace performance feedback. This study should take no more than 30 minutes to complete and you will receive \$1 for completing this study. If the study is only partially completed you will receive a prorated amount based on the amount of the study that has been completed. If you complete at half the study you will receive \$0.50, if you complete a third or less of the study you will receive \$0.33.

The purpose of this study is to achieve a greater understanding of how employees respond to workplace performance feedback.

If you agree to participate, you will be asked to read a paragraph involving an individual receiving feedback on their job performance. Subsequently, you will be asked fill out a series of questionnaires asking about how you would respond had you been the individual in the outlined scenario. Additionally, you will be asked to complete a series of questionnaires about your likes, dislikes, and typical behaviours. At the end of the survey there will also be a few additional questions regarding the content of the paragraph you were asked to read.

If you are willing to participate in this research, please click the link below to be directed to the survey.

Thank you,

Dr. Richard Goffin
Western University

Kabir Daljeet
Western University

Appendix K

Ethics Approval Notice



**Western
Research**

Research Ethics

**Western University Health Science Research Ethics Board
NMREB Delegated Initial Approval Notice**

Principal Investigator: Prof. Richard Goffin
Department & Institution: Social Science\Psychology, Western University

NMREB File Number: 106750
Study Title: Reactions to performance feedback in the workplace
Sponsor:

NMREB Initial Approval Date: June 02, 2015
NMREB Expiry Date: June 02, 2016

Documents Approved and/or Received for Information:

Document Name	Comments	Version Date
Letter of Information	Letter of information	2015/05/11
Recruitment Items	Recruitment Email	2015/05/11
Other	Debriefing Form	2015/05/11
Western University Protocol		2015/05/13
Instruments	Survey	

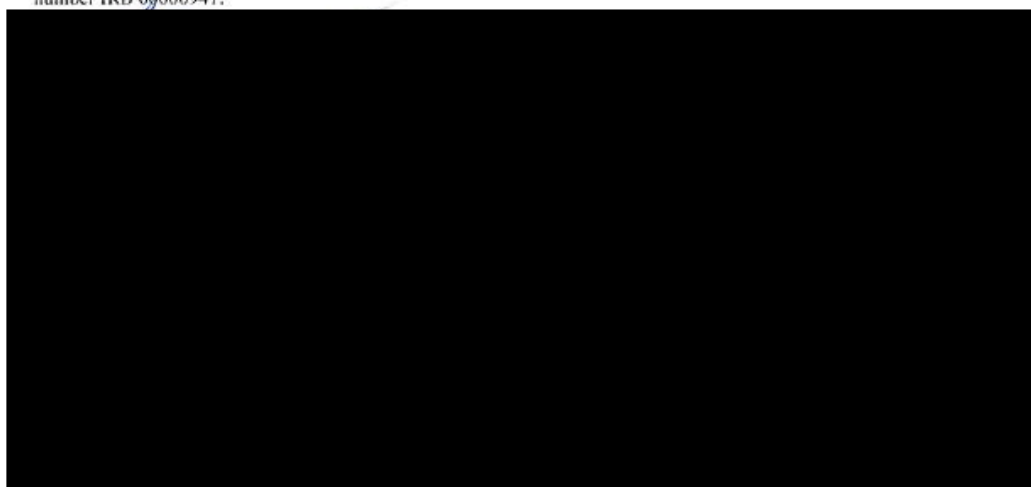
The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the above named study, as of the NMREB Initial Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 09000941.



Curriculum Vita

Name: Kabir Neel Daljeet

Post-secondary Education and Degrees: The University of Western Ontario
London, Ontario, Canada
2013-2015 M.Sc.

The University of Western Ontario
London, Ontario, Canada
2008-2012 B.A.

Honours and Awards: 1st Place poster award: Best poster in I/O Psychology, as awarded by CSIOP at CPA 2015 - \$250

Reva Gerstine Fellowship for Masters Study in Psychology
University of Western Ontario, 2013-2014, \$2800

3rd Place poster award: Best Poster in I/O Psychology, as awarded by CSIOP at CPA 2013 - \$100

Dean's Honor List 2011-2012

Related Work Experience: Teaching Assistant:
The University of Western Ontario
2013-2015

Publications:

Schneider, T.J., Goffin, R.D. & Daljeet, K. N. (2015). "Give us your Social Networking Site Passwords": Implications for personality and personnel selection. *Personality and Individual Differences*. 73, 78-83.

Daljeet, K. N. (2013). Is there a downside to engagement for employees? *Western Undergraduate Psychology Journal*, 1(1), 81-84.

Conference Presentations:

Daljeet, K. N., Giammarco, E. A. & Paunonen, S. (2015). *The prediction of CWB: Going beyond the FFM*. Poster presented at the annual meeting of the Canadian Psychology Association, Ottawa, Ontario, Canada.

Bremner, N., Daljeet, K. N. & Giammarco, E. A. (2015). A latent profile analysis of the HEXACO model of personality and its implications for motivation. Poster presented at the annual meeting of the Canadian Psychology Association, Ottawa, Ontario, Canada.

- Daljeet, K. N., Giammarco, E. A. & Paunonen, S. (2015). *The prediction of CWB: Going beyond the FFM*. Poster presented at meeting of the International Society of Individual Differences, London, Ontario, Canada.
- Chen, S., Moroz, S. & Daljeet, K. N. (2015). *The Dark Triad and Breakup Distress: Indirect Effects Through Relationship Investment and Commitment*. Poster presented at meeting of the International Society of Individual Differences, London, Ontario, Canada.
- Daljeet, K. N., Chen, S. & Moroz, S. (2015). *Machiavellianism and break-up distress: The mediating role of relationship investment*. Poster presented at the annual meeting of the Canadian Psychology Association, Ottawa, Ontario, Canada.
- Moroz, S., Daljeet, K. N. & Chen, S. (2015). *Narcissism and break-up distress: The indirect effect of commitment, investment and quality of alternatives*. Poster presented at the annual meeting of the Canadian Psychology Association, Ottawa, Ontario, Canada.
- Chen, S., Daljeet, K. N. & Moroz, S. (2015). *Bad romance: Examining the effects of relationship investment and the dark triad in break-up distress*. Poster presented at the annual meeting of the Canadian Psychology Association, Ottawa, Ontario, Canada.
- Schneider, T. J., Goffin, R. D., Daljeet, K. N., & Lessard, F.-E. (2014, August). *Donnez-nous vos mots de passe pour vos sites de réseautage social: Implications pour la sélection du personnel*. In M. Malo & J-S. Boudrias (Chair), *Investir dans le capital humain: De la sélection du personnel à la rétroaction aux candidats*. Symposium conducted at the 18th annual congress of L'Association Internationale de Psychologie du Travail de Langue Française, Florence, Italy.
- Daljeet, K. N. & Goffin, R. D. (2014). *Personality and counterproductive work behavior: The moderating role of test-taking motivation*. Poster presented at the annual meeting of the Canadian Psychology Association, Vancouver, British Columbia, Canada.
- Schneider, T. J., Daljeet, K. N. & Goffin, R. D. (2013). *Social networking sites and personality: Implications for selection*. Poster presented at the annual meeting of the Canadian Psychology Association, Quebec City, Quebec, Canada.
- Schneider, T. J., Daljeet, K. N. & Goffin, R. D. (2013). *Social networking sites and personality: Implications for selection*. Poster presented at the Southwestern Ontario I/O Psychology and OB Graduate Student Conference, University of Waterloo, Waterloo, Ontario, Canada.
- Daljeet, K. N. (2012). *Personality and counterproductive work behavior: The moderating role of test-taking motivation*. Poster presented at the 42nd annual convention of the Ontario Psychology Undergraduate Thesis Conference, York University, Toronto, Ontario, Canada.
- Daljeet, K. N. (2012). *Personality and counterproductive work behavior: The moderating role of test-taking motivation*. Poster presented at the Southwestern Ontario I/O

Psychology and OB Graduate Student Conference, University of Western Ontario,
London, Ontario, Canada.